



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,463	10/21/2003	Brian LaBrec	P901D	7258
23735	7590	11/29/2006		
DIGIMARC CORPORATION			EXAMINER	
9405 SW GEMINI DRIVE			CHEN, VIVIAN	
BEAVERTON, OR 97008				
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/692,463	LABREC, BRIAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vivian Chen	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 September 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 and 9-33 is/are pending in the application.  
 4a) Of the above claim(s) 21,22,24-26,28 and 29 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-7,9,11-17,19,20,23,27 and 30-31, 33 is/are rejected.  
 7) Claim(s) 10,18 and 32 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claim 8 has been cancelled by Applicant.

***Election/Restrictions***

1. Claims 21-22, 24-26, 28-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/6/2005.

***Specification***

2. The amendment filed 9/18/2006 is objected under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the limitation in new claim 33 with respect to the polyester layer having the bonding property having a similar degree of melting and viscosity as the core.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. The objection to the amendment filed 2/2/2006 under 35 U.S.C. 132(a) has been withdrawn in view of Applicant's amendments and arguments filed 9/18/2006.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention for the reasons stated above in the objection to the amendment filed 9/18/2006. Applicant has failed to specifically point out support for the claim language at issue.

6. Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 33, the phrase "similar degree of melting and viscosity" is vague and indefinite because it is unclear what constitutes a "similar" degree of melting or viscosity.

***Claim Rejections - 35 USC § 103***

7. Claims 1-3, 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over GUNN ET AL (US 6,066,594), in view of VERE ET AL (US 6,803,114).

GUNN ET AL discloses a laminate comprising a protective polyester cover layer (e.g., PET) and a second polyester layer (e.g., PETG), wherein the second polyester layer can be subsequently adhered or fused directly to a pre-printed silica-filled polyolefin core. (line 39, col. 3 to line 7, col. 4; line 16-35, col. 6; Example 1).

VERE ET AL discloses that it is well known in the art to use PETG as a fusible adherent intermediate layer between disparate polymeric layers. (line 17-25, col. 2)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a known polyester resins with good bonding properties (e.g., PETG) as an intermediate layer between the core layer and the additional outer layers in GUNN ET AL in order to obtain a laminate with good interlayer adhesion. It would be obvious to omit unnecessary or optional adhesive layers whenever possible in order to simplify manufacture and to reduce material costs.

8. Claims 1-7, 9, 11-16, 20, 23, 27, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over GUNN ET AL (US 6,066,594), in view of MITTEN ET AL (US 2002/0182352) and VERE ET AL (US 6,803,114).

GUNN ET AL discloses a laminate comprising a protective polyester cover layer (e.g., PET) and a second polyester layer (e.g., PETG), wherein the second polyester layer can be subsequently adhered or fused directly to a pre-printed silica-filled polyolefin core. (line 39, col. 3 to line 7, col. 4; line 16-35, col. 6; Example 1) However, the reference does not explicitly disclose the use of PCTA in the cover layer.

MITTEN ET AL discloses that it is well known in the art to use PCTA as the surface layer of polyester laminates in order to produce durable, abuse resistant layers for laminate structures. (paragraphs 0041,0043, 0046, 0059, 0062, 0066-0068, 0077)

VERE ET AL discloses that it is well known in the art to use PETG as a fusible adherent intermediate layer between disparate polymeric layers. (line 17-25, col. 2)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize a commercially available copolyester resin having good bonding properties (i.e., PETG) to adhere a surface layer formed from a known durable polyester material (i.e., PCTA) to a disparate substrate or core in the laminates of GUNN ET AL in order to obtain durable multilayer articles. It would be obvious to omit unnecessary or optional adhesive layers whenever possible in order to simplify manufacture and to reduce material costs. Regarding claim 15, the recitation of roll to roll or platen press processes are a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned.

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *The patentability of a product does not depend on its method of production.* If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

9. Claims 11-12, 20, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over MITTEN ET AL (US 2002/0182352).

MITTEN ET AL discloses a method of forming a multilayer laminate structure comprising a first durable polyester material (e.g., PCTA) and a second adherent polyester material (e.g., PETG), wherein the multilayer laminate is formed by coextrusion. (paragraphs 0041,0043, 0046, 0059, 0062, 0066-0068, 0077)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use coextrusion to form a multilayer film comprising two polyester layers wherein one polyester layer is PCTA and the other layer is PETG.

10. Claims 17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

- (a) REIDL (US 6,928,788); or
- (b) HASEGAWA ET AL (US 5,618,621).

REIDL discloses a method of forming a multilayer polyester film comprising a first protective polyester surface layer and a second PETG layer, wherein the film is formed by coextrusion, and wherein the second PETG layer is capable of adhering directly to a substrate. (Figure 3; line 5-30, col. 5).

HASEGAWA ET AL discloses a method of forming a multilayer polyester film comprising a first protective polyester surface layer and second copolyester layer, wherein the film is formed by coextrusion, and wherein the second copolyester is composed of ethylene

Art Unit: 1773

terephthalate modified with glycols, and wherein the second copolyester layer is capable of adhering directly to a substrate material. (line 10-32, col. 3; line 51-65, col. 3; line 23-40, col. 6)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use coextrusion to form a multilayer polyester film comprising two polyester layers wherein one polyester layer serves a protective function while the second polyester layer is capable of adhering directly to a substrate.

***Response to Arguments***

11. Applicant's arguments filed 9/18/2006 have been fully considered but they are not persuasive.

(A) Applicant argues that GUNN ET AL fails to disclose a laminate with two different polyester layers. However, GUNN ET AL clearly discloses a laminate wherein the core (Figure 2, reference number 112) has bonded *on at least one side* a combination of an intermediate first polyester layer (Figure 2, reference number 116) and a surface second polyester layer (Figure 2, reference number 124). The reference further explicitly states that the intermediate first layer, which can be PETG, can be directly adhered to the core layer (line 43-45, col. 3). The reference further states that the surface second layer, which can be a polyester, is to be a durable layer (line 40-42, col. 6). Since different properties are emphasized in the two layers, one of ordinary skill in the art would reasonably use different materials the two layers, in order to maximize the adherent and durability properties of individual layers.

(B) Applicant argues that GUNN ET AL, MITTEN ET AL and VERE ET AL each teach away from the claimed invention because they require the use of adhesive layers. With respect

Art Unit: 1773

to claims 11, 12, 20, 23, Applicant's arguments are moot because the features upon which applicant relies (i.e., the lack of adhesive layers, direct bonding of a polyester layer to a substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With respect to the other claims, despite Applicant's assertions, each of the relied upon references clearly indicate that the use of adhesive or bonding layers is *optional*, (GUNN ET AL, line 42-45, col. 3; VERE ET AL, line 13-14, col. 1; MITTEN ET AL, paragraph 0041) The mere indication of a preference does not constitute a clear teaching away when the reference(s) clearly allows for alternate means and/or indicate that alternate means are acceptable. Furthermore, the lack of specific examples utilizing such alternatives also does not constitute a clear teaching away, since the teachings of a reference encompass the disclosure as a whole. Since the elimination of unnecessary layers has obvious and well known benefits (e.g., simplified processing, reduced material costs, etc.), one of ordinary skill in the art would be motivated to avoid the use of adhesive layers when the bonding between two materials is adequate for a given end-use. Applicant has not provided any probative evidence to the contrary, nor has Applicant provided probative evidence of unexpected results or criticality from the recited direct bonding of the core to polyester layer.

(C) Applicant argues that MITTEN ET AL fails to teach the claimed invention in its entirety. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). MITTEN ET AL is relied upon

to illustrate that PCTA is a polyester material known to have desirable durability characteristics, and therefore is desirable as a cladding or surface layer in laminate or multilayer structures.

Applicant has not provided any probative evidence of criticality or unexpected results from the recited use of PCTA.

(D) Applicant argues that each of the references fails to teach the claimed invention in its entirety. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). GUNN ET AL is relied upon to illustrate that laminates having a durable/adherent/core structure, wherein the durable and adherent layer can be polyester materials are well known in the art, while MITTEN ET AL is relied upon to illustrate that PCTA is a polyester material known to have desirable durability characteristics, and therefore is desirable as a cladding or surface layer in laminate or multilayer structures, and VERE ET AL is relied upon to illustrate that PETG is well known in the art to be capable of adhering to disparate polymeric materials.

(E) With respect to Applicant's arguments regarding claim 15, the recitation of roll to roll or platen press processes are a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

[emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a *unobvious* difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993).

(F) Applicant's arguments with respect to claims 20, 23, 17, 19 have been fully considered but are deemed moot in view of the new grounds of rejection.

***Allowable Subject Matter***

12. Claims 10, 18, 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to disclose: (1) the recited method of coextruding two polyester layers wherein the first layer is PCTA and the second polyester layer is a layer with adherent properties capable of bonding to a substrate without the use of additional or intervening layers (claim 18); (2) a PCTA/PETG/core layer laminate wherein there is no discernible interface between the PETG and core layers (claim 32).

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 24, 2006



Vivian Chen  
Primary Examiner  
Art Unit 1773